What is claimed is:

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1. A composition comprising a somatostatin analog of the formula:

(A - B)

wherein:

A is cysteine, or a peptide chain comprising one or more cysteine residues, which is suitable for binding to a drug or chelator via a thiol linkage; and

B is a naturally occurring or synthetic somatostatin peptide, or fragment thereof, that binds to a somatostatin receptor.

- 10 2. The composition of claim 1, wherein A comprises the peptide sequence of any one of SEQ ID NOs:1-3, or wherein A is a single cysteine residue.
 - 3. The composition of claim 1, wherein B comprises SEQ ID NO:4.
- 15 4. The composition of claim 1, wherein the somatostatin analog comprises a peptide of any one of SEQ ID NOs:5-7.
 - 5. The composition of claim 1, further comprising a drug, or chelator suitable for binding a drug, wherein the drug or chelator is bound to the one or more cysteines by a thiol linkage.
 - 6. The composition of claim 5, wherein the drug is a therapeutic agent or a detectable label.
- 7. The composition of claim 6, wherein the therapeutic agent is a radioisotope, a cytotoxin, an immunostimulatory agent, an anti-angiogenic agent, a therapeutic gene, or a chemotherapeutic agent.
- 8. The composition of claim 5, wherein the chelator is a maleimido derivative of 30 DTPA or a maleimido derivative of a DTPA analog.

- 9. The composition of claim 1, further comprising a somatostatin analog that specifically binds to mammalian SSTR-positive cells *in vivo*.
- 10. The composition of claim 1, wherein the SSTR-positive cells are human 5 cancer cells.
 - 11. A method for detecting SSTR-positive cells in a mammalian subject comprising:
 - (a) administering to the subject a composition comprising a somatostatin analog of the formula:

(A - B)

wherein:

A is cysteine, or a peptide chain comprising one or more cysteine residues, wherein a detectable label is bound to the one or more cysteine residues via a thiol linkage; and

B is a naturally occurring or synthetic somatostatin peptide, or fragment thereof, which binds to a somatostatin receptor; and

- (b) detecting the detectable label, whereby SSTR-positive cells are detected.
- 12. The method of claim 11, wherein A comprises the peptide sequence of any one of SEQ ID NOs:1-3, or wherein A is a single cysteine residue.
 - 13. The method of claim 11, wherein B comprises SEQ ID NO:4.
- 14. The method of claim 11, wherein the somatostatin analog comprises a peptide of any one of SEQ ID NOs:5-7.
- 15. A method for treating an SSTR-associated disorder in a mammalian subject, 30 the method comprising administering to the subject a composition comprising a somatostatin analog of the formula:

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(A - B)

wherein:

A is cysteine, or a peptide chain comprising one or more cysteine residues, wherein a therapeutic agent is bound to the one or more cysteine residues via a thiol linkage; and

B is a naturally occurring or synthetic somatostatin peptide, or fragment thereof, which binds to a somatostatin receptor; and whereby a SSTR-associated disorder is treated.

- 16. The method of claim 15, wherein A comprises the peptide sequence of any one of SEQ ID NOs:1-3, or wherein A is a single cysteine residue.
 - 17. The method of claim 15, wherein B comprises SEQ ID NO:4.
- 15 18. The method of claim 15, wherein the somatostatin analog comprises a peptide of any one of SEQ ID NOs:5-7.
 - 19. The method of claim 15, wherein the therapeutic agent is selected from the group consisting of a radioisotope, a cytotoxin, an immunostimulatory agent, an anti-angiogenic agent, a therapeutic gene, and a chemotherapeutic agent.
 - 20. The method of claim 15, wherein the SSTR-associated disorder is cancer.

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